



December 15, 2014

Honorable Tom Wheeler
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Docket No. 07-114

Dear Chairman Wheeler:

The FindMe911 Coalition respectfully submits this letter and the appended materials in response to the November 20th request by the Federal Communications Commission (FCC) for comments on the “Roadmap for Improving E911 Location Accuracy” (“Roadmap”) proposed by the four major cell phone companies, CTIA – the Wireless Association, the Association of Public-Safety Communications Officials (APCO), and the National Emergency Number Association (NENA).

The FindMe911 Coalition was organized in 2013 to encourage the FCC to establish location accuracy standards for emergency calls made indoors, enabling first responders to locate callers from all locations rapidly and efficiently. FindMe911 is an effort supported by more than 200,000 national and local organizations and individuals. Its membership consists of a wide range of emergency responders, 911 dispatchers, and citizens interested in helping first responders find people facing emergencies.

After the “Roadmap” was released, the FindMe911 Coalition conducted a national survey of public safety officials to get input from 9-1-1 professionals on the front lines about their thoughts on the proposed plan. (Unfortunately, neither NENA nor APCO chose to solicit similar feedback from their membership prior to endorsing the “Roadmap.”)



That survey, conducted among 328 managers and employees of Public Safety Answering Points (PSAPs) from November 26th to December 1st 2014, found that the overwhelming majority of 9-1-1 employees believe the FCC should reject the phone company plan in favor of the original NPRM. The results were powerful and conclusive, as follows.

- The vast majority of 9-1-1 employees oppose the phone company plan: 96 percent of respondents said they supported the FCC's proposed public safety rules over the phone company plan;
- Most public safety officials would have voted against the deal: By a 10-1 margin, respondents said they would have rejected the phone company plan (76 percent to 8 percent), if it had been put to a vote;
- 9-1-1 professionals reject the associations' support for the deal: By nearly a 4-1 margin, respondents said they personally opposed NENA and APCO's decision to support the phone company deal (62 percent to 17 percent);
- The FCC's approach has strong support among 9-1-1 professionals: Upwards of 96 percent of respondents preferred the key elements of the FCC's approach, including specific indoor and vertical accuracy requirements, realistic timetables, coverage of all handsets, and use of any/all technologies;
- Most believe the FCC should move forward with its original indoor safety rules: Three in four respondents (76 percent) said the FCC should proceed with its original rules vs. just three percent who supported the phone company alternative; and
- Deep concern was expressed over use of Russian satellite system: A significant majority (57 percent) opposed incorporating the Russian GLONASS military satellite system into the U.S. 9-1-1- infrastructure, as the phone company plan has proposed.

The press release on that survey and a summary of the findings are appended to this letter.

Following that survey, and in response to a series of notable inaccuracies about the proposed "Roadmap" being promulgated by the cell phone companies, the FindMe911 Coalition conducted a webinar on December 8th 2014 for interested parties to learn more about the details of the cell phone company plan.



The webinar was led by FindMe911's director, Rear Admiral Jamie Barnett (Ret.), the former Chief of the FCC's Public Safety and Homeland Security Bureau, and the issues he discussed in his presentation summarize the major concerns of FindMe911 about the phone company "Roadmap."

As described in the webinar, those concerns include the fact that the "Roadmap":

- Has no actual dispatchable address requirements (i.e. it uses same 50 meter horizontal standard as the FCC's proposed rule),
- Would require accurate locations for only 13% of indoor callers after two years – due to the blended indoor/outdoor measurement – vs. 67% in the NPRM,
- Proposes testing and creation of a complicated and unproven Wi-Fi/Bluetooth-based database system,
- Includes no mandatory indoor accuracy requirements,
- Includes no mandatory vertical accuracy requirements,
- Abandons tens of millions of Americans using 2G and 3G phones, and
- Uses a Russian military-owned GLONASS satellite system as a core component of its approach.

The presentation for that webinar is also attached, and the webinar can be viewed in its entirety at <http://goo.gl/7Evq96>.

As described in these materials, FindMe911 urges the FCC to reject the phone companies' efforts to replace the realistic and achievable targets in its proposed rule with the weak, vague and unenforceable concepts outlined in the "Roadmap."

Instead, FindMe911 encourages the Commission to adopt its original rules as drafted to ensure that lifesaving location accuracy is provided in the immediate term to thousands of callers in need.

Sincerely,

A handwritten signature in black ink that reads "Andrew Weinstein".

Andrew Weinstein
FindMe911 Coalition



SURVEY FINDS PUBLIC SAFETY OFFICIALS STRONGLY OPPOSE PHONE COMPANY PLAN ON 9-1-1 LOCATION ACCURACY

Large Majority of Front Line 9-1-1 Professionals Said They Would Have Voted Against Phone Company Plan, Urge FCC to Proceed with Original Rules

Washington, DC – December 4, 2014 – The overwhelming majority of 9-1-1 professionals oppose the terms of a recent deal struck by major phone companies and executives of two public safety associations on wireless 9-1-1 indoor location accuracy, according to a national survey of more than 300 managers and dispatchers of the Public Safety Answering Points (PSAPs) that handle 9-1-1 calls. By a 10-1 margin, 9-1-1 professionals said they would have voted to oppose the deal, if given the opportunity.

The deal was announced in November by the four major wireless companies – AT&T, Verizon, Sprint, and T-Mobile – and the boards of two public safety associations, the National Emergency Number Association (NENA) and the Association of Public-Safety Communications Officials (APCO), but it drew immediate criticism from dozens of other public safety organizations that said it weakened, delayed, and/or eliminated critical elements of the FCC's proposed indoor safety rules.

Among the findings of the survey:

- The vast majority of 9-1-1 employees oppose the phone company plan: 96 percent of respondents said they support the FCC's proposed public safety rules over the phone company plan;
- Most public safety officials would have voted against the deal: By a 10-1 margin, respondents said they would have rejected the phone company plan (76 percent to 8 percent), if it had been put to a vote;
- 9-1-1 professionals reject the associations' support for the deal: By nearly a 4-1 margin, respondents said they personally oppose NENA and APCO's decision to support the phone company deal (62 percent to 17 percent);
- The FCC's approach has strong support among 9-1-1 professionals: Upwards of 96 percent of respondents preferred the key elements of the FCC's approach, including specific indoor and vertical accuracy requirements, aggressive timetables, coverage of all handsets, and use of any/all technologies;
- Most believe the FCC should move forward with its original indoor safety rules: Three in four respondents (76 percent) said the FCC should proceed with its original rules vs. just three percent who supported the phone company alternative; and

- Deep concern expressed over use of Russian satellite system: A significant majority (57 percent) opposed incorporating the Russian GLONASS military satellite system into the U.S. 9-1-1- infrastructure, as the phone company plan has proposed.

"In hindsight, the phone companies may have been correct in calling this a 'consensus' agreement, because there is an indisputable consensus among public safety officials that replacing the FCC's proposed rules with their 'roadmap' is a terrible deal for public safety," said Jamie Barnett, former Chief of the FCC's Public Safety and Homeland Security Bureau and Director of the Find Me 911 Coalition, which conducted the survey. "Our nation's frontline 9-1-1 professionals are almost unanimously opposed to the phone company proposal, and they believe the FCC should ignore any efforts to weaken the original horizontal and vertical requirements and timetable for indoor calls."

The full survey results and a side-by-side analysis of the provisions of the FCC's proposed rule and the phone companies' plan can be found at www.findme911.org.

Survey Methodology

The survey was conducted online among 328 managers and employees of Public Safety Answering Points (PSAPs) from November 26 – December 1, 2014. PSAP managers and employees were invited to participate in the survey via direct e-mails and online solicitations targeted to PSAP managers and employees. The survey was conducted via the SurveyGizmo web site, and it used an automatic mechanism to disqualify non-PSAP employees. The employment of respondents was further validated against known PSAP registries and via geographic data tied to IP address. The survey had a margin of error of +/- 5.4 percent at a 95 percent confidence level.

About the Find Me 911 Coalition

Find Me 911 is an effort supported by more than 190,000 individuals, as well as national and local organizations. The individuals and organizations represent a broad range of 911 operators and first responders – emergency medical services personnel, fire fighters and police. Find Me 911 seeks to ensure that the Federal Communications Commission (FCC) move forward quickly to establish a reasonable, measurable level of location accuracy for emergency calls made indoors, enabling first responders to locate emergency calls from wireless phones from all locations rapidly and efficiently.

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Summary of Public Safety Survey on Wireless 9-1-1 Location Plans

Conducted among 328 managers and employees of Public Safety Answering Points (PSAPs) that receive 9-1-1 calls

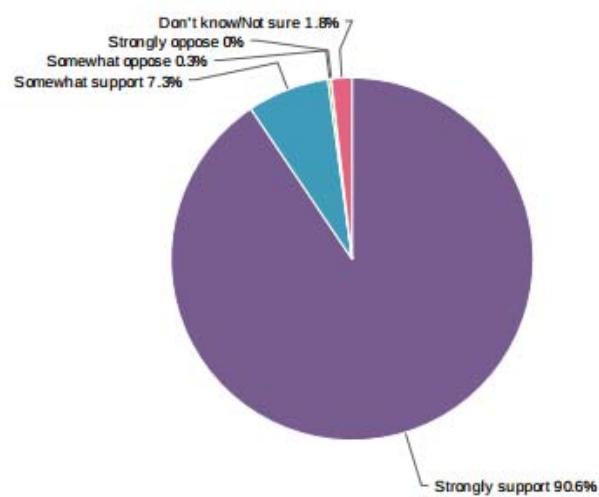
Margin of error +/5.4% at 95% confidence level

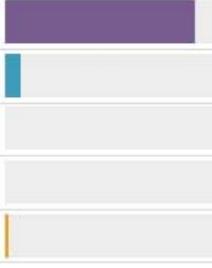
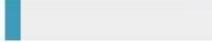
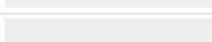
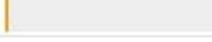
Survey conducted online from November 26 – December 1, 2014

For more information, please visit www.findme911.org

Question 1:

The FCC has proposed a rule that would require phone companies to share an accurate location for the majority of wireless 9-1-1 callers inside buildings no later than two years from now. Do you support or oppose that rule?

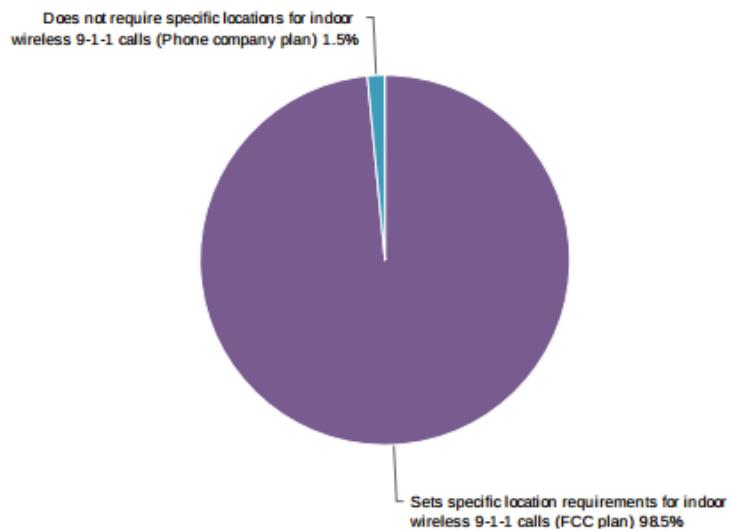


Strongly support	90.6%		297
Somewhat support	7.3%		24
Somewhat oppose	0.3%		1
Strongly oppose	0.0%		0
Don't know/Not sure	1.8%		6
Total			328

Question 2:

The phone companies have expressed strong opposition to the proposed FCC rule and recently put forward their own plan. For each of the following elements, please indicate whether you support the FCC's plan or the phone company plan.

Indoor location requirements:

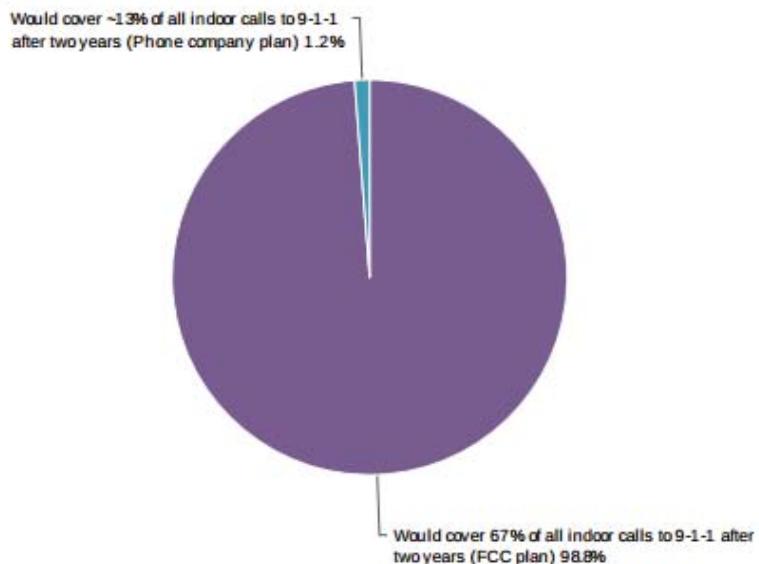


Sets specific location requirements for indoor wireless 9-1-1 calls (FCC plan)	98.5%	323
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Does not require specific locations for indoor wireless 9-1-1 calls (Phone company plan)	1.5%	5
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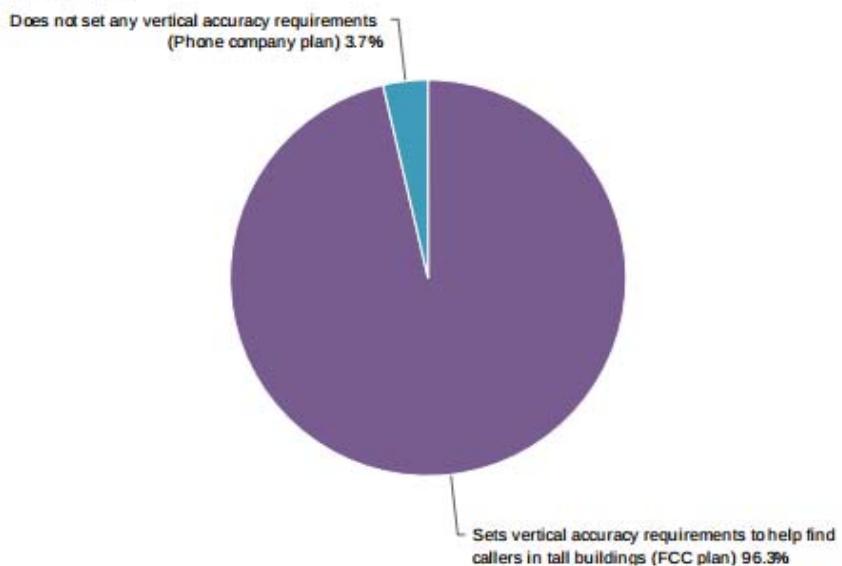
Total	328
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Coverage of indoor calls:



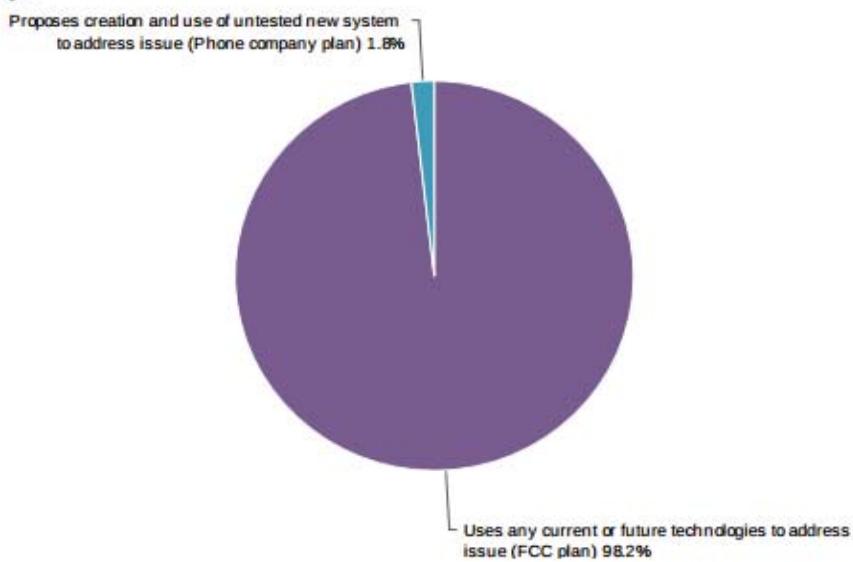
Would cover 67% of all indoor calls to 9-1-1 after two years (FCC plan)	98.8%	324
Would cover ~13% of all indoor calls to 9-1-1 after two years (Phone company plan)	1.2%	4
Total		328

Vertical accuracy requirements:



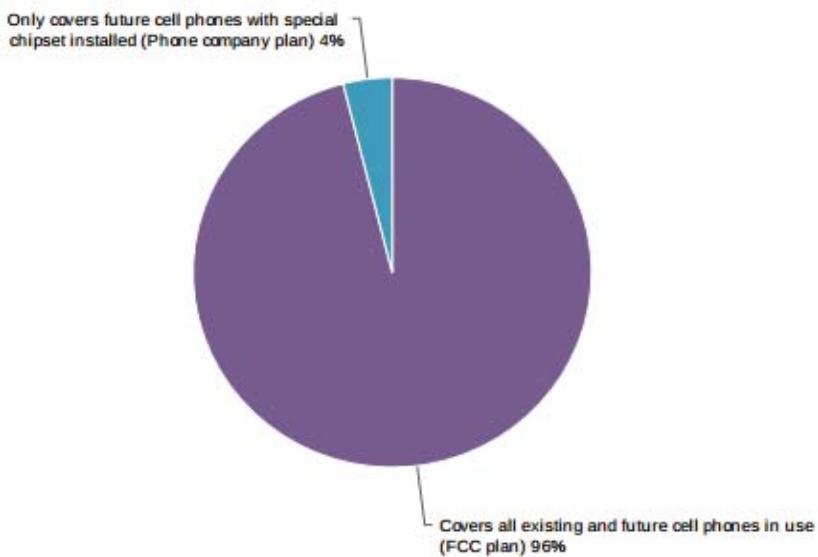
Sets vertical accuracy requirements to help find callers in tall buildings (FCC plan)	96.3%	316
Does not set any vertical accuracy requirements (Phone company plan)	3.7%	12
Total		328

Technology availability:



Uses any current or future technologies to address issue (FCC plan)	98.2%	322
Proposes creation and use of untested new system to address issue (Phone company plan)	1.8%	6
Total		328

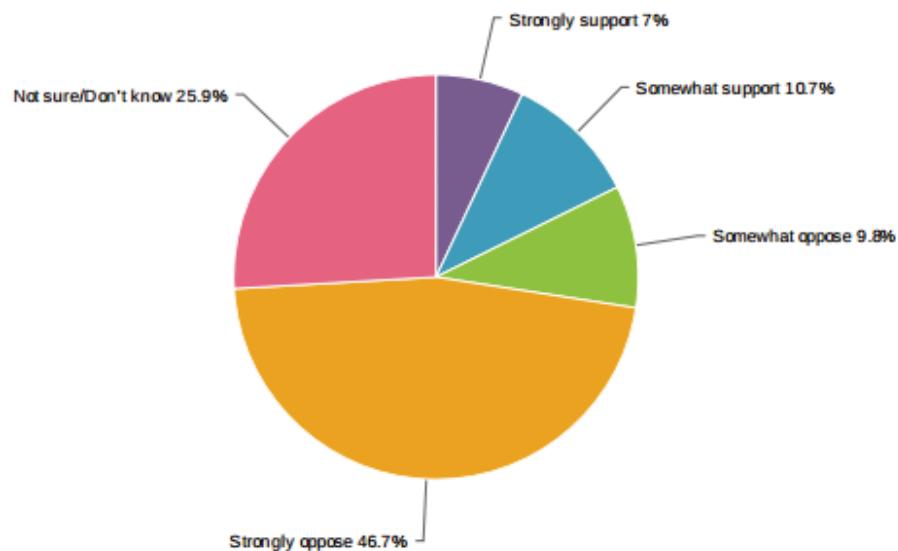
Coverage of existing/new cell phones:



Covers all existing and future cell phones in use (FCC plan)	96.0%	315
Only covers future cell phones with special chipset installed (Phone company plan)	4.0%	13
Total		328

Question 3:

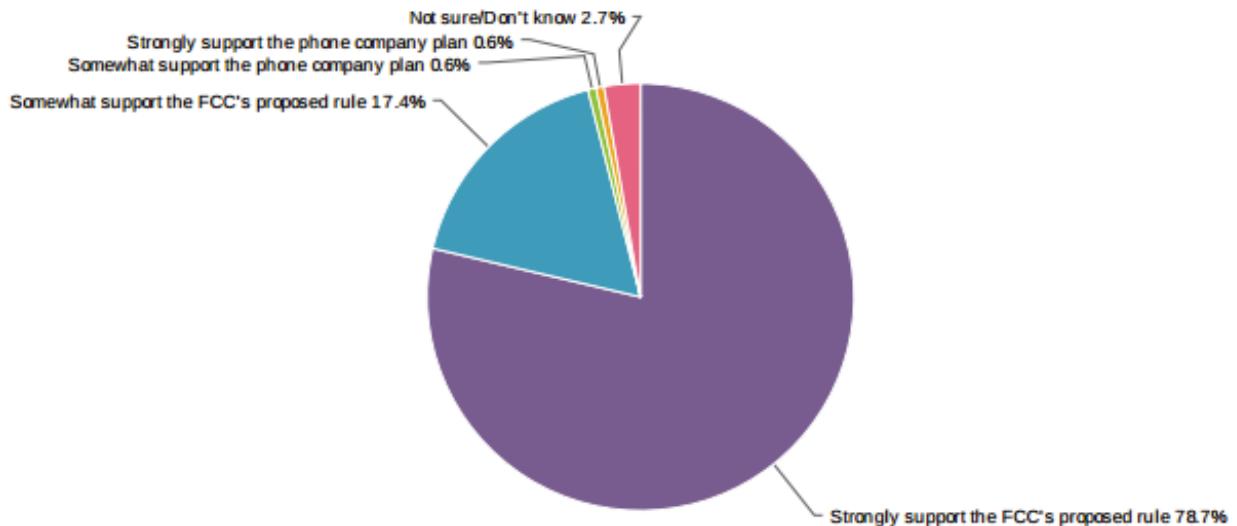
The plan proposed by the phone companies would use the Russian GLONASS satellite system, which is owned and operated by the Russian military, to help find 9-1-1 callers. Would you support or oppose a proposal to incorporate a Russian satellite system into the U.S. 9-1-1 infrastructure?



Strongly support	7.0%		23
Somewhat support	10.7%		35
Somewhat oppose	9.8%		32
Strongly oppose	46.7%		153
Not sure/Don't know	25.9%		85
Total			328

Question 4:

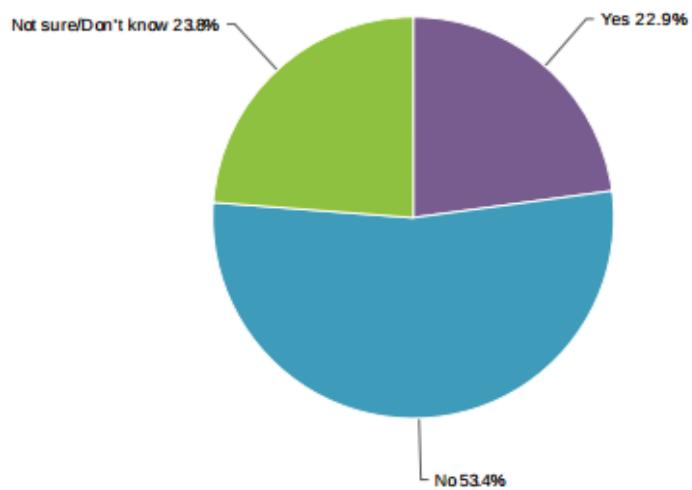
In general, do you support the FCC's proposed rule or the phone company plan?



Strongly support the FCC's proposed rule	78.7%		258
Somewhat support the FCC's proposed rule	17.4%		57
Somewhat support the phone company plan	0.6%		2
Strongly support the phone company plan	0.6%		2
Not sure/Don't know	2.7%		9
		Total	328

Question 5:

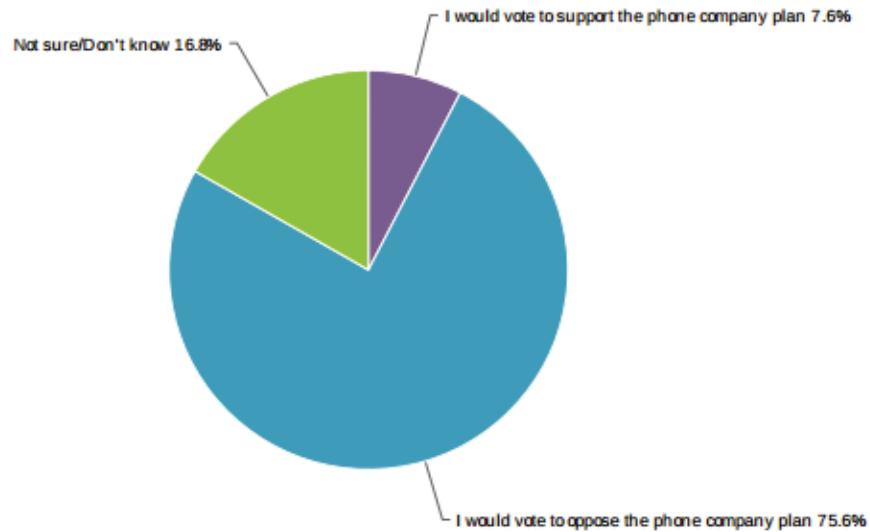
More than 20 public safety organizations representing police, fire, EMS, consumers, seniors and the deaf/hard-of-hearing have raised doubts about the proposed phone company plan, saying they were not consulted and do not support its approach. Do you think the phone company plan represents a "consensus" without the support of those stakeholders?



Yes	22.9%		75
No	53.4%		175
Not sure/Don't know	23.8%		78
Total			328

Question 6:

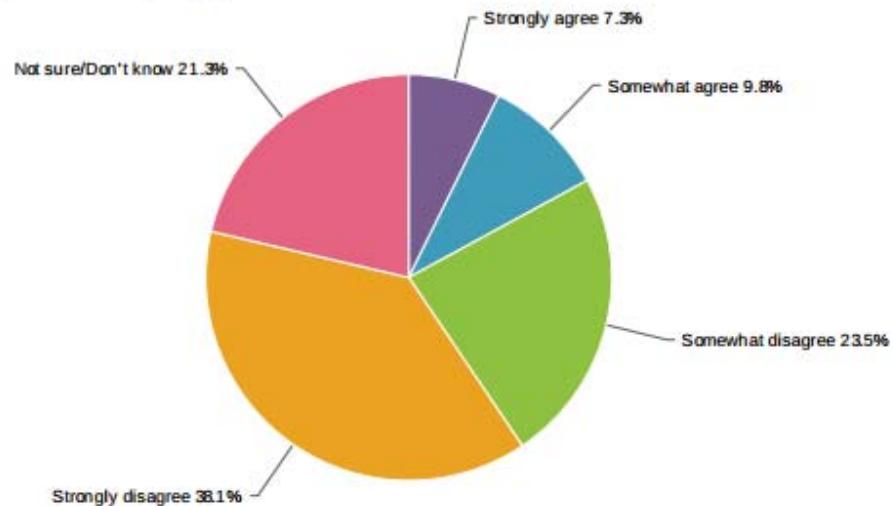
If one of your trade associations asked you to vote on the phone company plan, would you vote to support or oppose it?



I would vote to support the phone company plan	7.6%		25
I would vote to oppose the phone company plan	75.6%		248
Not sure/Don't know	16.8%		55
Total			328

Question 7:

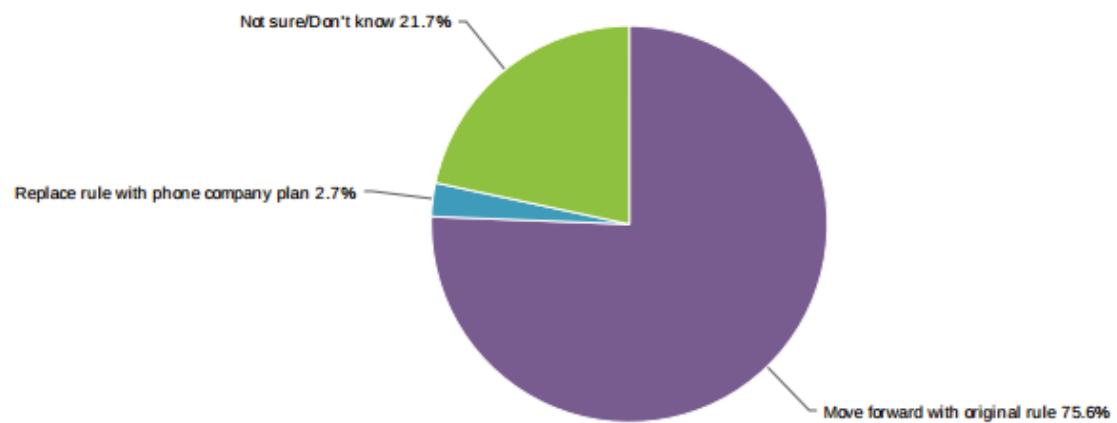
Although they have not take a vote of members, the national offices of the National Emergency Number Association (NENA) and the American Public-Safety Communications Organization (APCO) recently announced their support for the phone company plan. Do you agree or disagree with NENA and APCO's decision to support the phone company plan?



Strongly agree	7.3%		24
Somewhat agree	9.8%		32
Somewhat disagree	23.5%		77
Strongly disagree	38.1%		125
Not sure/Don't know	21.3%		70
Total			328

Question 8:

Should commissioners at the FCC move forward with the rule they originally proposed or replace it with the phone company plan?

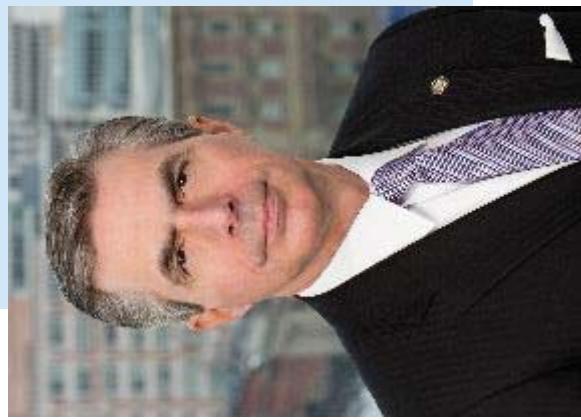


Move forward with original rule	75.6%		248
Replace rule with phone company plan	2.7%		9
Not sure/Don't know	21.7%		71
Total			328



Wireless 9-1-1 Location Accuracy:

The Truth About the FCC's 9-1-1 Proposed Regulations and
Consequences of the Phone Companies' Alternative Plan



Rear Admiral Jamie Barnett (Ret.)
Former Chief, Public Safety and Homeland Security Bureau,
Federal Communications Commission
Director, Find Me 911 Coalition
December 8, 2014

Who Is the Find Me 911 Coalition?

- ❑ **Coalition supported by more than 200,000 public safety professionals and concerned citizens**
 - Alliance for Retired Americans
 - American Academy of Emergency Medicine (AAEM)
 - California State Firefighters Association
 - International Union of Police Association, AFL-CIO (IUPA)
- ❑ Organizational members include Alliance for Retired Americans, American Academy of Emergency Medicine, International Union of Police Associations, US First Responders Association, and many others
 - Denise Amber Lee Foundation
 - US First Responders Association
 - 911Lifeline
 - Direct Connect 911
 - Telecommunications for the Deaf
 - Lights 4 Love
 - Grandfield Ambulance Service (Oklahoma)
 - Milledgeville Police Department E-911 (Georgia)
 - Link to 911 (Canton, GA)
 - Fire Fighter Cancer Foundation
 - Washington County Department of Public Safety (NY)
 - Putnam Lake Fire Department (New York)
 - Grassy Fork Volunteer Fire Department (TN)
 - Whitehall Police Department (New York)
 - Grays Harbor Communications (Washington)
 - Iron County 911 (Missouri)
 - Newberg Volunteer Rescue Squad & Fire Department (Oregon)
 - Pocono Summit Volunteer Fire Co. (PA)
- ❑ Purpose: Urging the FCC to adopt strong rules to ensure 9-1-1 professionals can find all wireless callers in need
- ❑ Technology-neutral: Does not advocate on behalf of any specific technology or vendor (FCC's proposed rules are tech neutral)
- ❑ One of many voices: Dozens of other organizations representing 9-1-1, police, fire, EMS, elderly, consumers, women, victims, and deaf/hard-of-hearing have expressed similar concerns about phone company plan

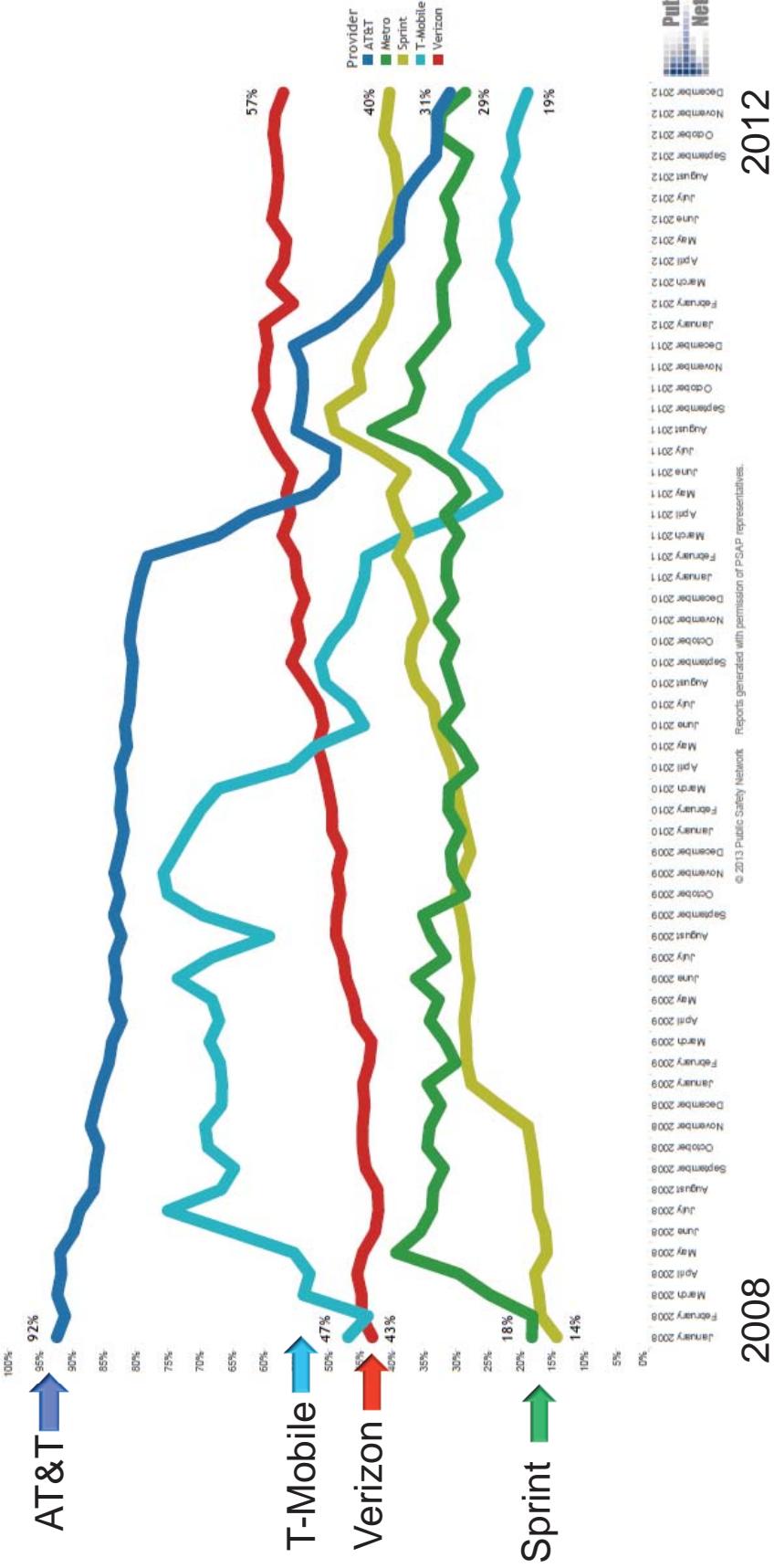
Identifying the Problem

- ❑ Over last several years, 9-1-1 professionals noticed trend of decreasing location accuracy for wireless calls to their PSAPs
- ❑ No hard data and phone companies denied any problems
- ❑ In August 2013, California's NENA chapter exposed crisis by releasing statewide data showing <50% of calls had accurate Phase II locations
- ❑ Data also showed tremendous drop-off for location accuracy at major PSAPs across state
- ❑ Data prompted FCC to request data from other states/localities

Identifying the Problem

CallNENA filing with FCC on Aug. 12, 2013 on Carrier Phase II Performance

Phase II Percentage at Call Termination for All Wireless 9-1-1 Calls Slide 1.1
Bakersfield PD, Pasadena PD, San Francisco CEC, San Jose PD/FD, Ventura County SO



FCC Filings Validate Scope of Crisis

- Percent of wireless 9-1-1 calls received by PSAPs without accurate location data, according to data shared with FCC:

California	55%	Pennsylvania*	65%
District of Columbia	90%	Texas	67%
North Carolina	47%	Utah	45%
Oregon	46%	* Delaware County	
- PSAP Survey: 82% of 9-1-1 professionals do not trust the location data provided to them by the wireless carriers
- FCC Proceeding 07-114:

“...we estimate that the location accuracy improvements we propose could save approximately 10,120 lives annually, for an annual benefit of approximately \$92 billion...”

What's the Problem?

- ❑ Over last several years, major cell phone companies switched to cheaper GPS-based location technologies
- ❑ Those technologies provide **reasonable** location fixes for outdoor callers with clear lines of sight to sky (after a delay)
- ❑ GPS-based technologies do **not reliably** provide accurate indoor location fixes for calls from inside buildings and in urban areas
- ❑ No FCC requirements for phone companies to measure or certify location **yield (reliability) or accuracy** for indoor wireless calls
- ❑ Phone companies chose financial savings over improved accuracy

Existing FCC Rules for Wireless 9-1-1 Calls

- ❑ No indoor **yield or accuracy certification** requirements.
- ❑ Only require measurement of accuracy of outdoor wireless 9-1-1 calls, not the ~50% of calls from indoor locations
- ❑ Complicated, with different obligations for “network” and “handset” based carriers
- ❑ No requirements for vertical **location**, so no ability to find callers by floor in tall buildings
- ❑ No “time to first fix” requirements, so **calls are often routed to the wrong PSAP**, 9-1-1 professionals must spend time asking for location of every call while waiting for data, **and short or dropped calls cannot be located**.

The FCC Proposal

- ❑ Applies **yield and accuracy** requirements to indoor call as outdoor
- ❑ Requires carriers to provide horizontal locations indoors (x/y coordinates) within 50 meters of accuracy for:
 - ❑ 67% of 9-1-1 callers within two years
 - ❑ 80% of 9-1-1 callers within five years
- ❑ Requires carriers to provide vertical locations indoors (z-axis) within 3 meters of accuracy for:
 - ❑ 67% of 9-1-1 callers within three years
 - ❑ 80% of 9-1-1 callers within five years
- ❑ Encourages phone companies to use any new or existing technologies or a combination
- ❑ Provides new level of **accountability and enforceability**

Cell Phone Company Compromise Roadmap

- ❑ Shifts attention to dispatchable address but has no requirements to deliver anything
- ❑ The only actual requirement is to deliver the same 50 meter horizontal accuracy standard as proposed FCC rule but delays and weakens benchmarks to:
 - ❑ 40% of all calls, not indoor calls, after two years
 - ❑ 50% of all calls, not indoor calls, after three years
- ❑ Proposes testing and creation of new and untested Wi-fi/Bluetooth-based system
- ❑ Includes no mandatory indoor accuracy requirements
- ❑ Includes no mandatory vertical accuracy requirements
- ❑ Abandons tens of millions of Americans using 2G and 3G phones
- ❑ Uses Russian military-owned GLONASS satellite system

Cell Phone Company Roadmap

- Shifts attention to dispatchable address but has no requirements to deliver anything
- The only actual requirement is to deliver the same 50 meter horizontal accuracy standard as proposed FCC rule but delays and weakens benchmarks to:
 - 40% **67%** of 9-1-1 callers within two years of *indoor calls*
 - 50% **80%** of 9-1-1 callers within five years of *indoor calls*
- Proposes testing and creation of new and untested Wi-fi/Bluetooth-based system
- Includes no mandatory indoor accuracy requirements
- Includes no mandatory vertical accuracy requirements
- Abandons tens of millions of Americans using 2G and 3G phones
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What About Dispatchable Addresses?

- ❑ We agree that the actual delivery of dispatchable address to PSAPs is a worthy and important goal, the ultimate gold standard
- ❑ Reaching that goal, however, will require overcoming technical complexities and huge implementation obstacles
- ❑ Mapping billions of portable and overlapping devices to specific street addresses in a single database is like decoding the human genome (and it must constantly be updated)
- ❑ The cell phone companies promise dispatchable address in the future but make no definite commitments
 - ❑ BUT, they want to displace the FCC's proposed rules for this unenforceable promise
- ❑ The cell phone companies know that this process will take years
 - The cell phone company plan does not actually have a requirement to deliver a dispatchable address

Myths and Facts – Dispatchable Address

- Supporters have claimed that the phone company plan is better because it focuses on dispatchable addresses, rather than 50 meter x-y and 3 meter z coordinates.
 - From the NENA webcast on the plan:
 - * The Roadmap does establish longer timeframes, but for a much tougher standard: Dispatchable Location instead of 50m.
- This is not so and NENA admits it in the same presentation. Here are the facts:
 - * To the extent that a given positioning source provides either a Dispatchable Location or an accuracy of 50m or better, carriers will receive credit for that fraction of fixes.
- In summary, there is no requirement in the agreement for a single dispatchable address (let alone *accurate* dispatchable address) to be provided, now or ever. The only requirement is a small percentage of 50 meter locations and no z-axis.

Myths and Facts - Enforceability

- ❑ Supporters claim the FCC can codify and enforce elements of the phone company plan, including:
 - ❑ Handset deployment timelines
 - ❑ Network design and end-to-end functionality timelines
 - ❑ Agreed-upon performance metrics
- ❑ According to NENA exec: “We [NENA] will be the cop on the beat”
- ❑ Neither FCC nor telcos have control over – or ability to accurately map
 - billions of individually-owned Wi-fi and Bluetooth hotspots
- ❑ FCC also has limited jurisdiction, if any, over handset deployment requirements for equipment manufacturers
- ❑ Any state role is eliminated in the phone company plan

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 - ❑ Handset deployment timelines
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- ❑ FCC also has limited jurisdiction, if any, over handset deployment requirements for equipment manufacturers
- ❑ Any state role is eliminated in the phone company plan

Myths and Facts – Consensus Agreement

- ❑ Phone companies invariably refer to their plan as a “consensus” agreement, with word appearing 22 times in materials
- ❑ Despite that, no outside groups involved in drafting of phone company plan (except NENA and APCO)
- ❑ Cut out of process: police, fire, EMS, seniors, disabled, women, victims, consumers, deaf/hard-of-hearing, minorities
- ❑ No major public safety org has endorsed deal **except NENA/APCO** (yet, they are desperately trying to find allies for this bad deal)
- ❑ National survey of 9-1-1 professionals found they preferred FCC proposal to phone company plan by 10-1 margin

The Consensus Is Deep Concern



Dennis D. Member, NASEMS

Comparison of Plans – Indoor Requirements

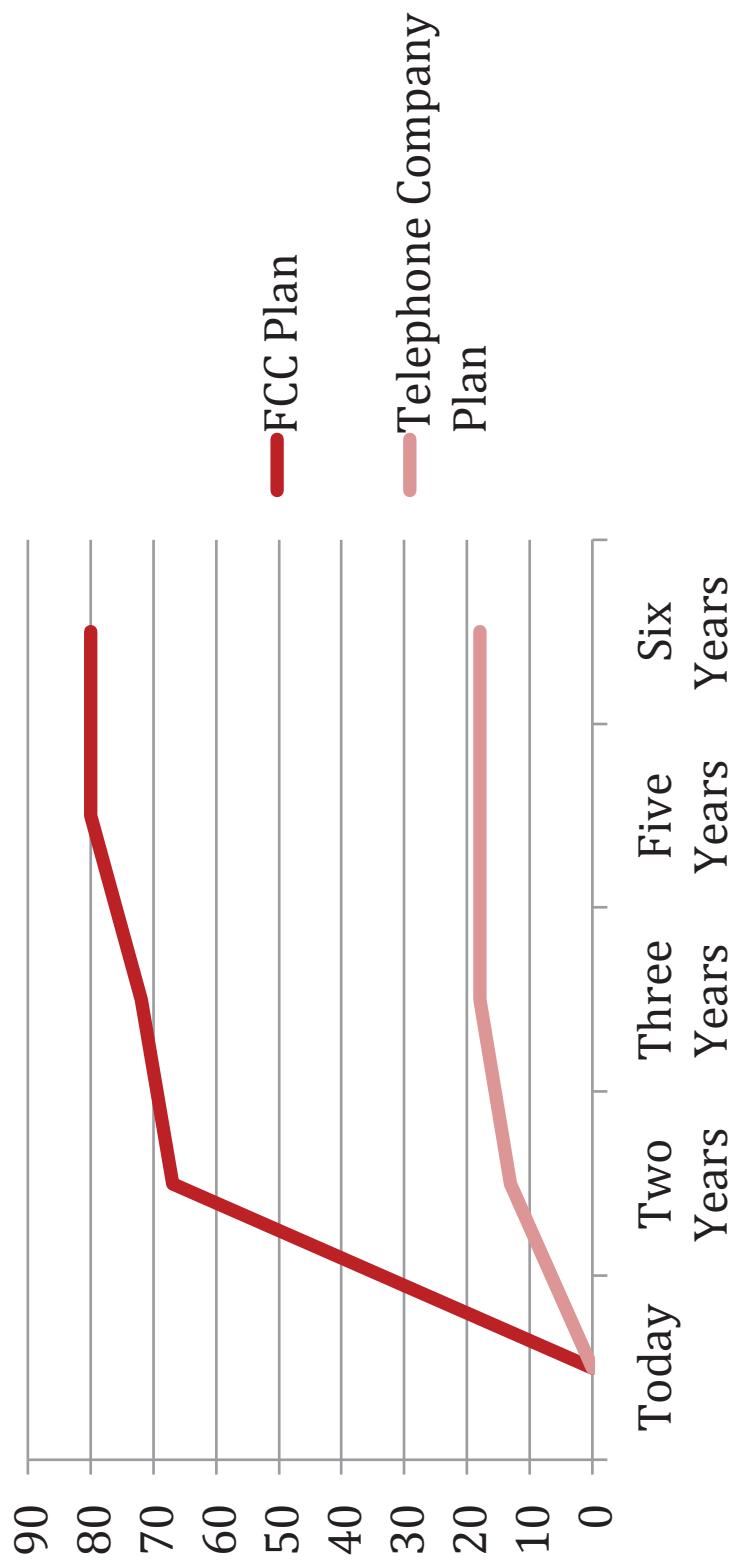
- ❑ FCC's Proposed Rule: Specific two, three, and five-year indoor accuracy requirements
- ❑ Phone company Roadmap has no indoor accuracy requirements
- ❑ From the phone company "Roadmap": Accuracy is defined as "the proportion of calls from any other technology or hybrid of technologies capable of location accuracy performance of 50m using a blended composite of indoor and outdoor"
- ❑ Vital distinction between indoor-specific and "blended" indoor/outdoor requirements for accuracy
 - ❑ "Blended" lets the cell phone companies game the system

Comparison of Plans – Horizontal Accuracy

- ❑ Under FCC plan, 67% of indoor calls must be located within 50 meters within two years.
- ❑ Under phone company plan, only 40% of all indoor/outdoor calls must be located within two years.
- ❑ If calls are split 50/50 indoors/outdoors, carriers can meet requirement by locating just 13% of indoor calls.
- ❑ The math: $67\% \text{ of outdoor calls already located under existing regs} + 13\% \text{ of indoor calls} \div 2 = 40\% \text{ “blended” requirement}$
- ❑ Under the final requirement of 50% of blended calls, the phone companies might never need to find more than 18% of indoor calls

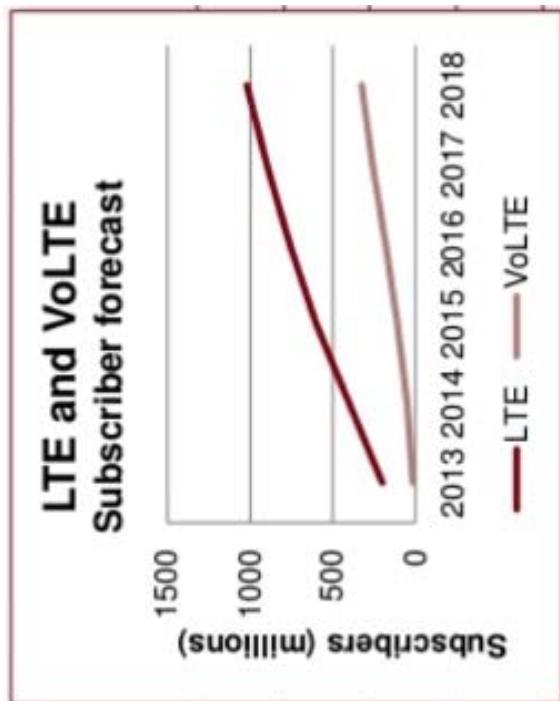
Comparison of Plans – Horizontal Accuracy

Percent of all indoor wireless 9-1-1 calls that must be located within 50 meters. (Assumes 50/50 indoor/outdoor call ratio.)



What about VoLTE?

- The carrier plan commits to 75% of all VoLTE wireless calls within five years and 80% of all VoLTE wireless calls within six years
- VoLTE deployment is just starting and has experienced significant delays to date
- Unclear how many calls will be VoLTE
- Even if VoLTE is 50% of market in 2020, carriers only have obligation to locate 75% of 50% of calls – or total of 37.5% of all calls, including outdoors



Comparison of Plans – Vertical Accuracy

- ❑ FCC's Proposed Rule: Specific three and five-year vertical accuracy requirements of 3 meters for 67% and 80% of calls
- ❑ Phone company "Roadmap": No indoor accuracy requirements for vertical
- ❑ An "assessment" to be conducted at three years with no requirements or deadlines.
- ❑ Phone companies agree to some undefined "z-axis solution" after six/eight years for the top 25/50 markets

Comparison of Plans – Handset Coverage

- ❑ FCC's Proposed Rule: All handsets in use today and in future are covered by rule
- ❑ Phone company "Roadmap": Overall handset coverage ends at 50% and could fall to zero for non-VoLTE phones
- ❑ Only future 4G handsets using special VoLTE chipset will be able to use proposed database system
- ❑ According to Ericsson, more than 50 million US cell phone users will still be on non-LTE phones in 2019

Comparison of Plans - Testing

- ❑ FCC's Proposed Rule: Proven CSRIC approach of placing calls to compare known location with shown location
- ❑ Phone company "Roadmap": Unproven approach in which the carriers "self-validate" their accuracy based on algorithms, not ground truth
- ❑ Phone company "Roadmap" would leave the fox in charge of henhouse, and we see where that got us
- ❑ We must have rules that will mandate accountability

Comparison of Plans - GLONASS

- ❑ GLONASS is a Russian military satellite system, owned and operated by the Russian government, providing their version of GPS
- ❑ Phone company “Roadmap” would integrate that Russian satellite system into our domestic 9-1-1 infrastructure
- ❑ Phone company “Roadmap” cites GLONASS at least seven times as a part of the approach it recommends
- ❑ Russians would have ability to interfere with, slow, disable, or worse – spoof -- a key component of our 9-1-1 infrastructure at any time

What Doesn't Work in the Cell Phone Company Roadmap

- ❑ Has no dispatchable address requirements (i.e. uses same 50 meter horizontal standard as FCC's rule)
- ❑ Would require accurate locations for only 13% of indoor callers after two years vs. 67% in FCC rule (and 18% vs. 80% after five years)
- ❑ Proposes testing and creation of extremely complicated and unproven Wi-fi/Bluetooth-based database system
- ❑ Includes no mandatory indoor accuracy requirements
- ❑ Includes no mandatory vertical accuracy requirements
- ❑ Abandons tens of millions of Americans using 2G and 3G phones
- ❑ Uses Russian military-owned GLONASS satellite system

Good Things in the Roadmap

- ❑ Goal of dispatchable addresses
 - ❑ Worth supporting as a goal
 - ❑ Should proceed with immediate design and testing
 - ❑ If testing proves feasibility, should work on rule to ensure enforceable implementation
 - ❑ Nothing in FCC rule would prevent full testing and implementation and pursuing dispatchable address
 - ❑ Nothing in the cell phone company “Roadmap” should delay implementation of the FCC’s proposed rules
- ❑ Reporting phone company metrics on live 9-1-1 calls
 - ❑ Rather than just reporting data to NENA/APCO, it should be made publicly available to all PSAPs and any parties

A Better Approach

- ❑ Combine the best of both worlds
- ❑ Adopt the proposed rules immediately as drafted with its strong and enforceable benchmarks to save lives
- ❑ Initiate new rulemaking on new phone company proposals now
- ❑ Start the design and testing process immediately to see whether the phone company approach is feasible
- ❑ Take a huge stride to save thousands of lives today, while setting a long-term path toward dispatchable addresses

NENA's Comments to the FCC on the Proposed Indoor Location Accuracy Rules

NENA's Comments to the FCC on the Proposed Indoor Location Accuracy Rules
filed by Trey Forgety on May 12, 2014

From page 28:

A “good faith” compliance regime is meaningless.

“NENA is aware of certain industry proposals that would provide a safe harbor against any potential enforcement action if a carrier professed to have undertaken a “good faith” effort to deploy compliant technologies and systems. **NENA wholeheartedly opposes such a regime.**

The public deserves an approach to public safety that provides more than a bare assertion that one party will not attempt to escape its obligations by sacrifice. Not only would such a standard render the Commission’s reasonable and carefully-crafted location performance requirements and roll-out timeframes meaningless, it would also set the stage for a wholly uncertain future, in which PSAPs and citizens alike could never know just *what* requirements carriers actually meet at any given time, much less rely upon them.

In the history of the Commission’s current location accuracy rules, NENA is aware of only a small number of enforcement actions, mostly related to delays in the initial implementation of the rules more than a decade ago. Such a pace surely should not strike fear into the hearts of carriers and their investors.”

TELFORD E. FORGETY, III
Attorney

May 2014

The Reality about NENA's Reality

Objections – The Reality

Admission that it
will take longer

Not tough, not

dispatchable location
and yes, it is 50m-
same as the FCC's
proposal

* The Roadmap does establish longer timeframes, but for a much
tougher standard: Dispatchable Location instead of 50m.

* The Roadmap includes provisions for the z-axis, but recognizes that
getting barometric sensors into handsets, deploying local reference
pressure stations, and standardizing pressure assistance data are
longer-term problems.

So, the FCC wasn't
going to adopt the rules
that they proposed
exactly 'anyway', so
let's just leave out all of
those other devices

* No final rule could have required Lat/Lon improvement for legacy
devices on legacy networks and survived court scrutiny. That is, the
FCC's rules would not have exactly mirrored its proposals, anyway.

* Currently, GloNaSS is the only additional GNSS that is available. As
others come on-line, Carriers can use them to improve the fraction of
50m fixes they get with A-GNSS (which is a generic term).

**It is the only other GPS system available, so that
makes it okay that it is Russian?**

Also, is NENA saying
the phone companies
threatened a lawsuit?

How to File Comments

- ❑ Deadline is Wednesday, December 10th for initial comments
- ❑ Deadline is Wednesday, December 17th for reply comments
- ❑ To file comments, go to this URL: bit.do/find911calls
- ❑ The proceeding number is 07-114
- ❑ Enter your name and address
- ❑ Type your comments of any length into a Word document and upload that file
- ❑ Tell the FCC to adopt its proposed rules as written and immediately issue a further rulemaking to incorporate dispatchable address responsibly, with accountability and enforceability

